Title: Observations and conversations: Home-preparation of infant formula among a sample of low-income mothers in the Southeastern U.S.

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ABSTRACT

Objective: Explore infant formula preparation attitudes and beliefs among low-income, formula-feeding, Southeastern U.S. mothers

Design: Cross-sectional study using in-home observations and in-depth interviews

Setting: Participant homes

Participants: Thirteen low-income mothers of normal birth weight, healthy, term infants ≤ 3 months old, who were predominantly feeding powdered or from-concentrate formula

Variables Measured: Reading formula preparation instructions; order of ingredient addition; leveling powdered formula scoop(s); adding cereal/other ingredients to bottles

Phenomenon of Interest: Perceptions of formula preparation/manipulation

Analysis: Descriptive statistics described sample characteristics and home-observation variables. Thematic analysis of in-depth interviews revealed the following major themes: Formula preparation can be intimidating; Expressions of complex heuristic perceptions about formula-preparation; Cost and convenience motivate maternal behaviors; and Infant cues override recommendations. Data from qualitative and quantitative activities were triangulated.

Results: Behaviors, including improper reconstitution and modifications/additions to prepared formula (e.g., infant cereal) were observed during home observations and/or described during in-depth interviews.

Inconsistencies were detected between observed behaviors (e.g., adding too much water to the bottle) and those reported during in-depth interviews (e.g., stating over-dilution could be detrimental to infant's health).

Conclusions and Implications: Targeting knowledge/skills gaps and behavioral motivators in the formula-feeding population could positively impact infant-feeding practices that occur outside of recommendations.

Key words: infant formula; maternal behaviors; infant-feeding; motivators; attitudes; skills